

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. A method for profiling chromatin accessibility of a genomic region in chromatin of a cell type to modification or digestion by a DNA modifying agent, comprising determining a chromatin accessibility profile, said chromatin accessibility profiling comprising a plurality of replicate measurements of each of a plurality of different genomic sequences in said genomic region, wherein each of said plurality of replicated measurements is a ratio of (i) copy numbers of said genomic sequence measured in DNA derived from chromatin of said cell type that has been treated with said DNA modifying agent and (ii) copy numbers of said genomic sequence measured in DNA derived from said cell type that has not been treated with said DNA modifying agent.

2. The method of claim 1, wherein said plurality of different genomic sequences comprises successively contiguous, overlapping, or regularly spaced sequences tiled across one or more portions of said genomic region.

3. The method of claim 1, where in the DNA modifying agent is the endonuclease DNaseI.

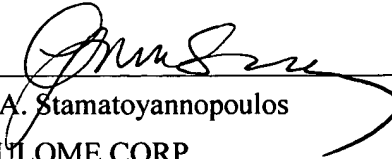
4. The method of claim 99 further comprising determining a baseline chromatin sensitivity profile by a method comprising

(a) smoothing the data in said chromatin sensitivity profile to obtain a baseline curve;
and

(b) determining the error bounds for said baseline curve; where in said baseline curve and said error bounds constitute said baseline chromatin profile

Respectfully submitted,

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